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| APPLICATION NO.                  | FILING DATE       | FIRST NAMED INVENTOR    | ATTORNEY DOCKET NO. | CONFIRMATION NO. |  |
|----------------------------------|-------------------|-------------------------|---------------------|------------------|--|
| 10/526,856                       | 03/03/2005        | Jaime Prat Urreiztieta  | G80-032 US          | 5421             |  |
| 21706 7                          | 7590 07/11/2006   |                         | EXAM                | EXAMINER         |  |
| NOTARO AND MICHALOS              |                   |                         | LIN, KU             | LIN, KUANG Y     |  |
| 100 DUTCH HILL ROAD<br>SUITE 110 |                   |                         | ART UNIT            | PAPER NUMBER     |  |
| ORANGEBUF                        | RG, NY 10962-2100 |                         | 1725                |                  |  |
| DATE MAILED: 07                  |                   | DATE MAILED: 07/11/2006 | 5                   |                  |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|  |  |   |  | 1 |
|--|--|---|--|---|
|  |  | Application No.   | Applicant(s)   |   |
|  |  | 10/526,856  | PRAT URREIZTIETA, JAIME  |   |
|  | Office Action Summary  | Examiner  | Art Unit   |   |
|  |  | Kuang Y. Lin  | 1725   |   |
| Dariad f   | The MAILING DATE of this communication app   | ears on the cover sheet with the c  | correspondence address   |   |
| Period fo  | • •  | VIC CET TO EVOIDE A MONTH   | (C) OD THIDTY (OO) DAYC  |   |
| WHI(<br>- Exte<br>after<br>- If NO<br>- Failt<br>Any | IORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING Downsions of time may be available under the provisions of 37 CFR 1.13 r SIX (6) MONTHS from the mailing date of this communication. Disperiod for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing led patent term adjustment. See 37 CFR 1.704(b).   | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin vill apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONE | N. nely filed the mailing date of this communication. D (35 U.S.C. § 133). |   |
| Status   |  |   |  |   |
| 1) 又   | Responsive to communication(s) filed on <u>06 Ju</u>   | ılv 2006  |  |   |
| · —  |  | action is non-final.  |  |   |
|  | Since this application is in condition for allowar   |   | osecution as to the merits is  |   |
|  | closed in accordance with the practice under E   | x parte Quayle, 1935 C.D. 11, 49  | 53 O.G. 213.   |   |
| Disposit   | ion of Claims  |   |  |   |
| 4)⊠  | Claim(s) 1-12 is/are pending in the application.   |   |  |   |
|  | 4a) Of the above claim(s) is/are withdraw  | wn from consideration.  |  |   |
| 5)[  | Claim(s) is/are allowed.   |   | •  |   |
|  | Claim(s) 1-12 is/are rejected.   |   |  |   |
| _  | Claim(s) is/are objected to.   |   |  |   |
| 8)∟  | Claim(s) are subject to restriction and/o  | r election requirement.   |  |   |
| Applicat   | ion Papers   |   |  |   |
| 9)[  | The specification is objected to by the Examine  | r.  |  |   |
| 10)  |  | epted or b) $\square$ objected to by the $\square$  |  |   |
|  | Applicant may not request that any objection to the  | •   | • •  |   |
| 441  | Replacement drawing sheet(s) including the correct   |   | •  |   |
| 11)  | The oath or declaration is objected to by the Ex   | amilier. Note the attached Office   | ACTION OF TORM P10-152.  |   |
| Priority   | under 35 U.S.C. § 119  |   |  |   |
| 12)  | Acknowledgment is made of a claim for foreign  | priority under 35 U.S.C. § 119(a)   | )-(d) or (f).  |   |
| a)   | ☐ All b)☐ Some * c)☐ None of:  |   |  |   |
|  | 1. Certified copies of the priority documents  |   |  |   |
|  | 2. Certified copies of the priority documents  |   |  |   |
|  | <ol> <li>Copies of the certified copies of the prior<br/>application from the International Bureau</li> </ol>  | •   | ed in this National Stage  |   |
| * (  | See the attached detailed Office action for a list   | •   | ed.  |   |
| •  | The second secon | 2 co copied flot foodiff  | <del></del> -  |   |
|  |  |   |  |   |
| Attachmen  | nt(s)  |   |  |   |
|  | ce of References Cited (PTO-892)   | 4) Interview Summary  |  |   |
| 3) 🔲 Infor   | ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) or No(s)/Mail Date   | Paper No(s)/Mail Dail Notice of Informal P  | ate Patent Application (PTO-152)   |   |

U.S. Patent and Trademark Office PTOL-326 (Rev. 7-05)

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1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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2. Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over either US 6,197,850 to Posada Fernandez et al. or US 6,360,808 to Twardowska et al. and further in view of WO 00/73236 to Skerdi (or the corresponding US 6,972,059) and US 3,815,665 to Baur.

Each of the primary references substantially shows the invention as claimed except that their exothermic compositions contain fluoride and that they do not show to form the sleeve as a single piece. However, WO '236 shows that it is desirable to use a fluoride free exothermic composition for forming feeder due to environmental reason. The composition contains aluminum and magnesium as fuel. It would have been obvious to use the exothermic composition of the primary reference free of fluoride and containing aluminum and magnesium as fuel in view of WO '236. (Fluoride functions as a catalyst (see Norton, col. 3, line 36+ and Takashima, col. 4, line 38+. The additional use of magnesium as fuel in WO' 236 is to act as igniting primer (see Montgomery, col. I, line 24+) to compensate the function of fluoride). Further, US '665 shows that it is conventional to form the exothermic sleeve as a single piece. Apparently, forming the sleeve as a single piece has an advantage over the sleeve formed

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from a multiple pieces in that it does not require an additional assembling step for forming the sleeve and thus the foundry operation is simpler. It would have been obvious to form the sleeve of the primary references as a single piece in view of the advantage.

- 3. Applicant's arguments filed July 6, 2006 have been fully considered but they are not persuasive.
  - a. In page 8, 1<sup>st</sup> paragraph of the remarks applicant stated that conventional exothermic sleeves are formed of two pieces. However, it is noted that US '665 to Baur shows to form the sleeve either as single piece or consisting of two pieces. A double chamfer is provided in the lower opening for both structures. Thus, applicant's argument is not deemed to be persuasive. With respect to the use of plug in the other opening as claimed, Baur also provide a cover for covering the top opening of the sleeve. The function of the cover is the same as that of claimed plug. Thus, the claimed plug is deemed to be an obvious variation of sleeve structure of Baur.
  - b. In page 9, 4<sup>th</sup> paragraph of the remarks applicant stated that Skerdi does not mention or recognize the problem known as "fish eye" which is overcome by the claimed invention. However, the scope of the claim does not include any limitation with respect to the "fish eye".
- 4. All claims are drawn to the same invention claimed in the application prior to the entry of the submission under 37 CFR 1.114 and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the

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application prior to entry under 37 CFR 1.114. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action after the filing of a request for continued examination and the submission under 37 CFR 1.114. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kuang Y. Lin whose telephone number is 571-272-1179. The examiner can normally be reached on Monday-Friday, 10:00-6:30,.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kuang Y. Lin Primary Examiner Art Unit 1725